

## EXHIBIT A

Applicant(s)	Coden	<b><u>AMENDMENT</u></b> <b><u>AND RESPONSE</u></b> <b><u>UNDER 37 C.F.R. § 1.111</u></b>
Serial No.	09/893,047	
Filing Date	6/27/2001	
Confirmation No.	5948	
Examiner Name	Pham, Brenda H.	
Group Art Unit	5948	
Attorney Docket No.	100.095US02	
Title: TELECOMMUNICATION NETWORK WITH VARIABLE ADDRESS LEARNING, SWITCHING AND ROUTING		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Applicants have reviewed the Office Action mailed on September 14, 2005. Please amend the above-identified application as follows.

**Amendments to the Claims** are reflected in the listing of claims that begins on page 2 of this paper.

**Remarks** begin on page 9 of this paper.

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Attorney Docket No. 100.095US02

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of claims:**

1. (Original) A ring network for transporting data packets between network devices, the ring network comprising:

    a number of ring switches, each ring switch having at least one ring port, at least one local port and at least one table that self learns which network devices are associated with each port of the ring switch based on a selected source identifier from the packets processed by the ring switch;

    the at least one ring port of each ring switch being coupled to a ring port of another ring switch in the ring network;

    wherein the ring switch switches data packets between its ring and local ports to direct the data packets to specified network devices associated with the at least one local port of the ring switches in the ring network; and

    wherein the ports of the ring switches are configured such that data packets received at the at least one ring port and the at least one local port that are not destined for a network device associated with the at least one local port of the ring switch are switched to another ring switch on the ring network based on the at least one table.

2. (Original) The ring network of claim 1, wherein the selected source identifier comprises a media access control (MAC) address.

3. (Original) The ring network of claim 1, wherein the selected source identifier comprises an Internet Protocol (IP) address.

4. (Original) The ring network of claim 1, wherein the selected source identifier comprises at least a portion of a hierarchical address.

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5. (Original) The ring network of claim 1, wherein the selected source identifier comprises a port number of a universal datagram protocol.

6. (Original) The ring network of claim 1, wherein the selected source identifier comprises a combination of two or more identifiers at the same or different protocol levels for the data packet.

7. (Original) The ring network of claim 1, wherein local ports or selected devices on selected local ports of selected ring switches are associated with a common identifier.

8. (Original) The ring network of claim 7, wherein the common identifier is prepended, postpended, or included in packets.

9. (Original) The ring network of claim 8, wherein the ring switch removes the common identifier before transmitting the packet out the local port.

10. (Original) The ring network of claim 1, wherein the ring switches prepend, postpend or include an identifier to packets that are to be multicast to a number of network devices.

11. (Original) A ring switch for a ring network, the ring switch comprising:  
at least one ring port that is coupleable to transport data packets in a ring network;  
at least one local port that is coupleable to at least one local area network or device;  
at least one table that identifies network devices associated with each port of the ring switch; and

wherein data packets received at the at least one ring port that are not destined for a network device associated with any of the at least one local ports of the ring switch are switched

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to another ring switch coupled to the at least one ring port based on the at least one table without the use of a token or encapsulating the packet.

12. (Original) The ring switch of claim 11, wherein the selected source identifier comprises a media access control (MAC) address.

13. (Original) The ring switch of claim 11, wherein the selected source identifier comprises an Internet Protocol (IP) address.

14. (Original) The ring switch of claim 11, wherein the selected source identifier comprises at least a portion of a hierarchical address.

15. (Original) The ring switch of claim 11, wherein the selected source identifier comprises a port number of a universal datagram protocol.

16. (Original) The ring switch of claim 11, wherein the selected source identifier comprises a combination of two or more identifiers at different protocol levels for the data packet.

17. (Original) The ring switch of claim 11, wherein local ports or selected devices on selected local ports of selected ring switches are associated with a common identifier.

18. (Original) The ring switch of claim 17, wherein the common identifier is prepended, postpended, or included in packets.

19. (Original) The ring switch of claim 18, wherein the ring switch removes the common identifier before transmitting the packet out the local port.

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20. (Original) The ring switch of claim 11, wherein the ring switches prepend, postpend or include an identifier to packets that are to be multicast to a number of network devices.

21. (Original) A ring switch for a ring network, the ring switch comprising:  
at least one ring port that is coupleable to transport data packets over a ring of ring switches;  
at least one local port that is coupleable to at least one local area network or device;  
at least one table that stores the identifiers of network devices associated with the at least one ring port and the at least one local port;  
wherein the ring switch allows data packets received at the ring port to be retransmitted out the ring port of the switch so that data packets can be forwarded on to other ring switches in the ring network based on the at least one table; and  
a circuit associated with the at least one ring port that removes incoming data packets that have a source identifier that corresponds to a network device associated with the at least one local port of the switch.

22. (Original) The ring switch of claim 21, wherein the selected source identifier comprises a media access control (MAC) address.

23. (Original) The ring switch of claim 21, wherein the selected source identifier comprises an Internet Protocol (IP) address.

24. (Original) The ring switch of claim 21, wherein the selected source identifier comprises at least a portion of a hierarchical address.

25. (Original) The ring switch of claim 21, wherein the selected source identifier comprises a port number of a universal datagram protocol.

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26. (Original) The ring switch of claim 21, wherein the selected source identifier comprises a combination of two or more identifiers at the same or different protocol levels for the data packet.

27. (Original) The ring switch of claim 21, wherein local ports or selected devices on selected local ports of selected ring switches are associated with a common identifier.

28. (Original) The ring switch of claim 27, wherein the common identifier is prepended, postpended, or included in packets.

29. (Original) The ring switch of claim 28, wherein the ring switch removes the common identifier before transmitting the packet out the local port.

30. (Original) The ring switch of claim 21, wherein the ring switches prepend, postpend, or include an identifier to packets that are to be multicast to a number of network devices.

31. (Original) A ring switch for a ring network, the ring switch comprising:  
a ring-in port that is coupleable to receive data packets from the ring network;  
a ring-out port that is coupleable to provide data packets to the ring network;  
at least one local port that is coupleable to a local area network;  
at least one table to track the a selected identifier of network devices associated with the ports of the ring switch; and

wherein the table associates the selected identifier of network devices with the ring-out port when data packets are received at the ring-in port.

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32. (Original) The ring switch of claim 31, wherein the selected identifier comprises a media access control (MAC) address.

33. (Original) The ring switch of claim 31, wherein the selected identifier comprises an Internet Protocol (IP) address.

34. (Original) The ring switch of claim 31, wherein the selected identifier comprises at least a portion of a hierarchical address.

35. (Original) The ring switch of claim 31, wherein the selected identifier comprises a port number of a universal datagram protocol.

36. The ring switch of claim 31, wherein the selected identifier comprises a combination of two or more identifiers at the same or different protocol levels for the data packet.

37. (Original) The ring switch of claim 31, wherein local ports or selected devices on selected local ports of selected ring switches are associated with a common identifier.

38. (Original) The ring switch of claim 37, wherein the common identifier is prepended, postpended, or included in packets.

39. (Original) The ring switch of claim 38, wherein the ring switch removes the common identifier before transmitting the packet out the local port.

40. (Original) The ring switch of claim 31, wherein the ring switches prepend, postpend or include an identifier to packets that are to be multicast to a number of network devices.

**AMENDMENT AND RESPONSE**

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Claims 41 – 74      Cancelled

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Title: TELECOMMUNICATION NETWORK WITH VARIABLE ADDRESS LEARNING,  
SWITCHING AND ROUTING**REMARKS**

Applicant has reviewed the Office Action mailed on September 14, 2005 as well as the art cited. Claims 1 – 74 are pending in this application.

**Affirmation of Election**

As provisionally elected by Applicant's representative, Laura A. Ryan, on August 24, 2005, Applicant elects to prosecute the invention of Group 1, Claims 1-40.

The claims of the non-elected invention, claims 41-74, are hereby canceled without prejudice or disclaimer. However, Applicant reserves the right to later file continuations or divisionals having claims directed to the non-elected inventions.

**TERMINAL DISCLAIMER**

Applicant submits a Terminal Disclaimer along with this Response to overcome the double patenting rejections.

**Double Patenting Rejection**

Claims 1-40 were rejected under the judicially created doctrine of double patenting over claims 1-9 of U.S. Patent No. 6,331,985.

Claims 1-40 were rejected under the judicially created doctrine of double patenting over claim 1 of U.S. Patent No. 6,154,462. A Terminal Disclaimer in compliance with 37 CFR 1.321(c) is enclosed herewith to overcome these rejections, along with a Credit Card Payment form (PTO-2038) for payment of the terminal disclaimer fee of \$130.

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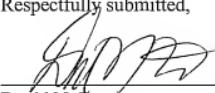
**CONCLUSION**

Applicant respectfully submits that claims 1-40 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at 612-455-1680.

Respectfully submitted,

Date: December 14, 2005

  
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David N. Fogg  
Reg. No. 35,138

Attorneys for Applicant  
Fogg and Associates, LLC  
P.O. Box 581339  
Minneapolis, MN 55458-1339  
T - (612) 332-4720  
F - (612) 332-4731

## EXHIBIT A

Applicant(s)	Coden	<b>FACSIMILE TRANSMITTAL FORM</b>
Serial No.	09/893,047	
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Examiner Name	Brenda H. Pham	
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**TOTAL PAGES: 13 pgs. (including cover sheet)**  
**TO CENTRAL FAX - (571) 273-8300**  
**Attention: Examiner Brenda H. Pham, Art Unit 5948**

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

<b>Enclosures</b>				
<b>The following documents are enclosed:</b>				
<ol style="list-style-type: none"> <li>1. Response to Office Action mailed September 14, 2005 (10pgs)</li> <li>2. Terminal Disclaimer (2pgs)</li> <li>3. PTO-2038 for payment of \$130 terminal disclaimer fee</li> </ol>				
<b>Please charge any additional fees or credit any overpayments to Deposit Account No. 502432.</b>				
<b>Submitted By</b>				
Name	David N. Edge	Reg. No.	35,138	Telephone
Signature			Date	December 14, 2005
Attorneys for Applicant Fogg & Associates, LLC P.O. Box 581339 Minneapolis, MN 55458-1339 T: 612-332-4720 F: 612-332-4731				
CUSTOMER NUMBER: 34206				
<b>Certificate of Transmission</b>				
I certify that this paper, and the above-identified documents, are being transmitted by facsimile to, Examiner Brenda H. Pham, Group Art Unit 5948 (Facsimile No. 571-273-8300) of the United States Patent and Trademark Office on December 14, 2005				
Name	Louisa E. Pineault	Signature	